New England Deaconess Hospital

pulse

185 Pilgrim Road, Boston, Massachusetts VOLUME 33 – NUMBER 17 MAY, 1980

New Doppler Scanner enhances NEDH stroke prevention work

Stroke prevention continues to be a growing field at the Deaconess. Last November, the PULSE detailed two diagnostic tests performed by the Noninvasive Vascular Laboratory which can quickly, painlessly and relatively inexpensively detect blockages in the carotid arteries located on both sides of the neck leading to the brain.

Expanding this leadership position in stroke prevention, the radiology department of NEDH directed by Dr. Melvin E. Clouse, chairman, now offers a new out-patient testing procedure called Echoflow Doppler scanning which uses sound waves to detect blockages in the carotid arteries.

If left undetected, these blockages composed of hardened calcium, cholesterol, blood platelets and fibrin can cause a cerebral vascular accident (CVA) – a stroke that injures the brain by interrupting the flow of oxygen carrying blood to certain parts of the brain. This, in turn, can lead to permanent paralysis, impairment of speech or problems with balance and sight.

In 1976, approximately 440,000 people suffered cerebral vascular accidents (CVA) in the United States and Canada, half of whom died. Survivors are often hospitalized for long periods, placing an enormous burden on health care facilities. Two million Americans with a history of hospitalization for stroke are alive today, requiring some degree of care. Total costs for strokes in the U.S. for care and rehabilitation have recently been estimated at more than $7 billion a year.

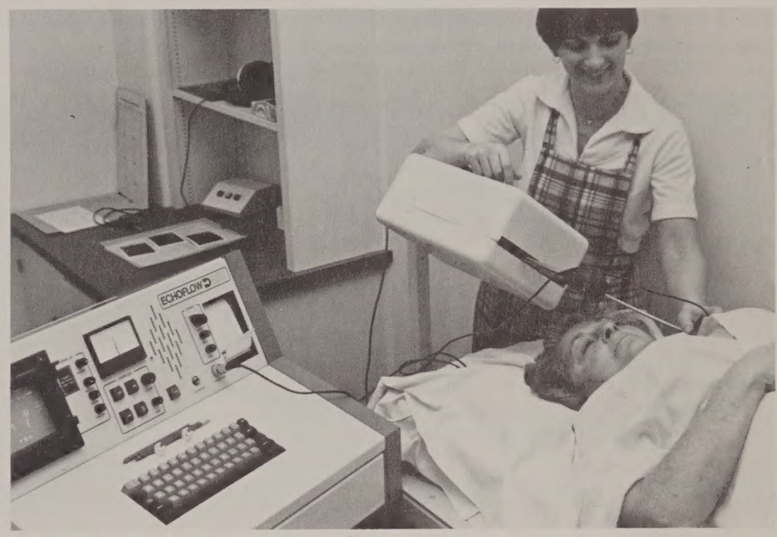
Locally, the average hospital bill in Massachusetts for a survivor of a first stroke exceeds $20,000. And this figure does not include indirect costs such as lost earnings due to disability and non-hospital expenses for patient care. Nor can it ever place a dollar figure on the suffering involved.

Strokes occur for a variety of reasons with hypertension (high blood pressure) being a leading cause. People who are overweight, those with diabetes and those with a family history of strokes or heart attacks run a higher risk of stroke.

About half of all stroke victims receive passing warnings before their attack. These symptoms include sudden weakness on one side of the body that returns to normal in about five minutes; temporary inability to pick up things; or momentary blindness in one eye that quickly disappears.

The only definitive diagnostic test available to identify potential stroke victims is the X-ray angiogram. These tests use injected dyes to reveal abnormalities in the blood vessels. Unfortunately, cerebral angiograms have their drawbacks as a routine screening device. They can cost up to $1000 to administer as the patient must be hospitalized for a day or two, and they carry a slight attendant medical risk.

(continued on page 4)



NEDH radiology technician administers an Echoflow stroke prevention test.

Cancer symposium meets June 5-7

Dr. Charles G. Moertel, professor of oncology at the Mayo Medical School and director of the Mayo Comprehensive Cancer Center, will be guest moderator of the ninth annual Deaconess Cancer Symposium on June 5-7 in Joslin Auditorium.

Dr. Moertel, a prominent medical oncologist with particular expertise in gastrointestinal tumors, has been instrumental in fostering the combined modality approach to cancer treatment and the use of supportive therapies.

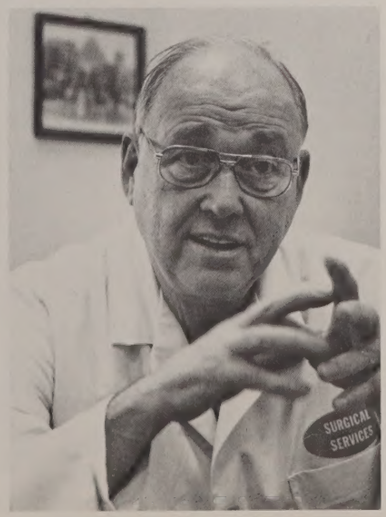
This year's course, "Cancer Management: Strategies for Cure" will be devoted to discussion on the diagnosis and management of breast cancer, soft tissue sarcomas and skin tumors, colorectal tumors and malignant lymphomas.

The Saturday morning session will focus on special topics which will include: an update on new pathologic and radiologic techniques, hyperalimentation and the treatment of testicular cancer and oat cell lung cancer.

Four members of the Deaconess medical staff, Drs. Jay Harris, Al Bothe, Jr., Joyce McCaffrey and Mark Silverman, are coordinating the course which is sponsored by the hospital's cancer committee. Members of the staff may audit the course or earn CME credits by registering through the Harvard Department of Continuing Education. For more information, contact Candy Fullwood at 732-8538.

Dr. William V. McDermott named department of surgery chairman

Dr. William V. McDermott, scientific director of the Cancer Research Institute, will succeed Dr. Cornelius E. Sedgwick as chairman of the department of surgery on July 1.

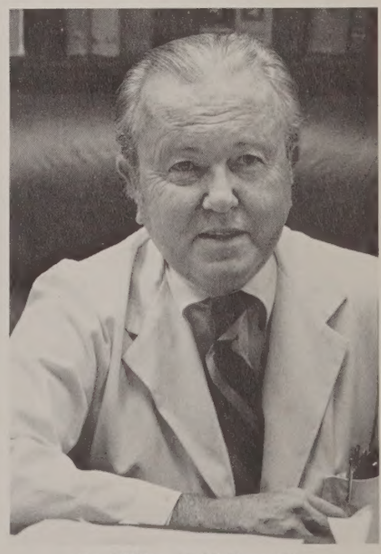


Dr. Cornelius E. Sedgwick

Dr. Sedgwick, who has completed his 14th year as chairman, has been an active member of both the Lahey Clinic Foundation and the New England Deaconess Hospital since 1947. He will remain on the active staff of both institutions.

During his term as chairman of NEDH's department of surgery, Dr. Sedgwick organized a single surgical department under one head and he was instrumental in building up the surgical residency program. He is currently clinical professor of surgery at Harvard Medical School. Dr. Sedgwick is a member of many surgical societies and has made numerous contributions to surgical literature.

Dr. McDermott will serve a three-year term as chairman. He is the Cheever Professor of Surgery at Harvard Medical School and is head of Harvard's department of surgery, which involves four other affiliated hospitals – the Cambridge, Faulkner, Mt. Auburn and Manchester VA Hospitals.



Dr. William V. McDermott

Plastic surgery offers a way to reconstruct and restore the body

Plastic surgery in some ways is a misnomer – lay people tend to think that the surgeon uses plastic to rebuild parts of the body. Actually, the Latin root of "plastic" means to mold or shape, but the plastic (or reconstructive) surgeon uses skin and/or bone grafts from different parts of the body in his or her work.

Sometimes this type of surgery is performed in order to restore a function, other times to provide a function that never fully developed. Patients who require plastic surgery include those with congenital deformities, burn and accident victims and those who need extra bone and tissue support after the removal of a tumor. But whatever the source of the problem, the plastic surgeon is an integral part of the reconstructive surgical team, working with microsurgeons and orthopedic surgeons to combine their specialized skills in treating a patient from pre-op to rehabilitation.

This is certainly true at the Deaconess where plastic and reconstructive surgeons, microsurgeons and orthopedic surgeons often consult one another.

Fairly recent developments in the three overlapping fields have made plastic surgery a more popular specialty among new surgeons. "Over the past ten years we have discovered that the human body has a reservoir of spare parts and donor sites which can be used in the reconstruction and repair of injured areas of the body," said Dr. Francis Wolfort, NEDH plastic surgeon.

"Bone, skin, fat and muscle can be moved from virtually any part of the body. The groin, thigh and side of the trunk are especially valuable donor sites because they have fairly large blood vessels which enable the surgeon to easily match the whole piece with the vessels in the new location. Free flap transfers, the process of moving tissue and bone with its own blood supply from one location to another has opened up new vistas in the field of reconstructive surgery."

In its earlier days plastic surgery encompassed several specific areas. After the two World Wars, plastic surgeons were in great demand in the treatment of facial wounds, and they gained additional expertise by dealing with mouth tumors. After removal of a tumor, plastic surgeons covered the floor of the mouth with skin and tissue flaps to protect the exposed area, and in some instances, rebuilt the jaw. Another common problem involved patients who received x-ray treatments following neck surgery. The treatment would break down the closure, thereby exposing the carotid artery. Plastic surgeons protected the incision by grafting a skin flap to the site.

But for the most part, plastic surgeons were preoccupied with covering bedsores and ulcers – protecting wounds so the patient's body would have time to heal. "The work was, and is, unglamorous, but very necessary in order to keep infection out," said Dr. Wolfort, "That's one of the reasons the Deaconess infection rate is so low – the careful attention to detail and handling of the wound, the type of dressings used and the proper drainage of fluids." While expanding their field over the years, plastic surgeons have continued to play a role in the treatment of these problems.

Dr. Wolfort previously worked as attending surgeon at John Hopkins University Hospital, and as director of plastic surgery and of the burn unit at Baltimore City Hospital. When he moved to Boston in 1970, there were only 6 plastic surgeons in the state – now there are 56. In addition to his work at NEDH, Dr. Wolfort is chief of surgery, and of plastic surgery, at the Cambridge Hospital where he deals primarily with hand injuries.

(continued on page 4)

Dr. Francis Wolfort examines a patient's arm following surgery to repair five torn tendons.

Brookline and Deaconess Hospitals agree to closer ties

The first step in establishing a closer affiliation with Brookline Hospital was taken in late January when Brookline Hospital accepted a Deaconess proposal outlining such a plan.

Over the past four months, a joint committee representing both hospitals has been working on a letter of agreement which will put the contract into operation.

The agreement should be mutually beneficial, according to Associate Director David Lilley, since the Deaconess will be able to refer less critical admissions to Brookline Hospital, thereby cutting down on our long, urgent waiting list while improving Brookline's occupancy rate. In return, Brookline Hospital will refer to the Deaconess patients needing more specialized care.

Dr. Randolph Reinhold, director of the Deaconess ambulatory services, will be named director of community medicine at Brookline Hospital. In that position he will be responsible for expanding the hospital's outpatient community services.

Brookline Hospital will hire two physicians who have completed their residency at the Deaconess to assist in covering the clinic and hospital during the day.

In a separate move, Brookline Hospital's board of trustees appointed Dr. Jules Schwaber as physician-in-chief of the hospital, effective July 1.

Cardiac cath lab opens on Deac 3

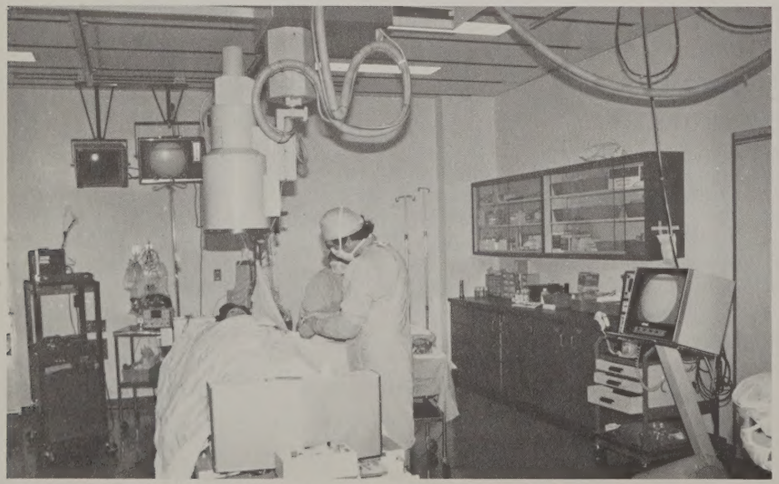
With little fanfare, the cardiac catherization laboratory has moved to enlarged new quarters on Deaconess 3, where it will continue to perform diagnostic and therapeutic studies of the heart.

For the first time the move brings together all elements involved in cardiac catherization work on one floor. A battery of diagnostic test equipment including EKG, 24-hour monitors, vector and echo cardiographs, together with all support technicians and central office space, will be housed in a bright suite adjacent to the blood bank.

For Dr. O. Stevens Leland, head of the cardiac catherization laboratory, the move comes as "a great moment in my history." Fifteen years ago, Dr. Leland's lab moved into temporary quarters on Farr 5 where it remained until the recent consolidation.

"The move has accomplished a number of good things. It has allowed us to update our older facility into cheerier quarters while at the same time effectively doubling our capacity. The new equipment is safer and we should expect to see better patient service and improved personnel safety as a result," said Dr. Leland.

Dr. Leland praised the maintenance and engineering department for its role in constructing the new lab.



Dr. Samuel J. Shubrooks performs a cardiac catherization in the new lab.

School of Nursing Graduation

Graduation and baccalaureate ceremonies for the class of 1980 will be on June 12, 1980. All are welcome to join us at Marsh Chapel at 2:00 p.m. for baccalaureate, and at Temple Israel at 8:15 p.m. for graduation.

Ice Chips is a huge success

The recent opening-night benefit of "Ice Chips '80", sponsored by the Friends of the Deaconess, proved an overwhelming financial and artistic success.

A standing room only crowd of over 2500 from the Hospital and the general public was treated to near flawless performances from Olympic skating stars, New England champions and members of the Skating Club of Boston.

Standing ovations were accorded Olympic Bronze Medalist Charles Tichner; Tai Babilonia and Randy Gardner, world pair champions; Sheryl Franks and Michael Botticelli, Olympic competitors, and Elaine Zayak, world competitors.

Mrs. Lauriston Ward, Jr., chairman of the Ice Chips committee, who arranged the benefit with the Skating Club, and Dr. Tenley Albright, honorary chairman, expect proceeds to exceed $7000. These funds will be used to refurbish the solariums and patient areas at NEDH.

Service award dinner draws 360 employees to celebration

The ballroom at the Sheraton Boston Hotel was crowded with Deaconess employees again this year as 360 people attended the 25th Annual Service Award Dinner.

Following the invocation by Chaplain Guy Steele and greetings from Charles L. Smith, Jr., vice chairman of the board of trustees, President Laurens MacLure commented that the dinner offered an opportunity for "all of us who have made the Deaconess a part of our lives to get together away from the hospital and have a good time. It's an opportunity for us to say thank you for what you are doing for our patients."

Director Richard E. Lee presented service awards of merit from the General Board of Health and Welfare ministries of the United Methodist Church to those employees having 25 or more years of service.

But ceremonies were kept brief as employees enjoyed a full course dinner of prime ribs of beef topped off by dancing to the music of Rudy Delcore's orchestra.

Going downtown – About 75 service award participants packed two buses for the short ride from the Deaconess to the Sheraton Boston.

Tomorrow they'll be back in uniforms but for tonight the occupants of this table live it up.

Director Richard E. Lee (3rd-l) after presenting service awards of merit to: (l-r) Robert Tinch, Sr. (30 years), pathology; Catherine E. Greenlaw (40 years), pathology; Sarah E. Tompkins (30 years), ambulatory services; Parthenia Cofield (25 years), building services; and Ralph DeBernardo (25 years), laboratories.

Shall we dance? Joe Russell, respiratory therapy, and Allouma Clair, nurses aide, enjoy a fast dance to the beat of Rudy Delcore's orchestra.

Dr. Shields Warren receives a standing ovation in honor of his 53 years service to the Deaconess.

Larry Tempesta, building services, and his wife, Gertrude, enjoy a break between dances.

Deaconess News in Brief

Director **Richard Lee** was recently appointed chairman of the Massachusetts Hospital Association's Standing Committee on Nursing. The committee will provide the MHA board of trustees with recommendations to strengthen its relationship with the nursing profession.

The Deaconess received a certificate of appreciation from **United Way** of Massachusetts Bay in recognition of the hospital's contribution to the 1979-80 United Way campaign. Hospital employees donated nearly $31,000 to the campaign, which was organized for the medical staff by Dr. Melvin E. Clouse, and for employees by Administrative Assistant Martin Cernek.

Assistant Director **Robert Pence** presented a paper on the organization and operation of an effective tumor registry during a program held on March 19 in Bridgeport, Connecticut. The meeting was sponsored by the American Cancer Society, Connecticut Division, Inc., the American College of Surgeons and other Connecticut cancer organizations.

Dr. Daniel Miller, otolaryngologist, was elected president of the American Otolaryngological Association at the Combined Otolaryngological Spring Meeting held in Palm Beach, Florida last month. Dr. Miller was formerly president both of the American Society for Head and Neck Surgery from 1974-75, and of the Triological Society (American Laryngological, Rhinological and Otological Society, Inc.) from 1977-78. At the Palm Beach meeting a paper on chemotherapy in head and neck carcinoma was delivered by Drs. Miller, Ralph Weichselbaum, Richard Fabian (all NEDH) and Thomas Ervin (Sidney Farber Cancer Institute).

Dr. Michael Bradbury, NEDH and Joslin, recently presented three papers on vitreous surgery instrumentation and indications at the Vail Vitrectomy Symposium in Colorado.

Lynne Ometer, assistant director of dietetics for patient nutritional care, has been apppointed to the advisory committee for the Division of Clinical Dietetics and Research of the American Dietetic Association. The committee is comprised of six members representing each of the five clinical dietetic practice groups (diabetes, critical care, pediatrics, renal and research) and one special group. Miss Ometer will represent those dietetic practitioners who function in a generalist rather than a specialist role.

The Reverend Guy L. Steele, director of the department of pastoral care, has been granted the Dr. of Ministry's Degree by Boston University's School of Theology. Dr. Steele's thesis, a planning – evaluation study, was on the topic, "A Medical Student in Clinical Pastoral Education." The degree was granted as of January 20.

Plastic surgery *(continued from page 1)*

"Acute hand injuries account for more than 60% of the traumatic injuries seen in an emergency room," said Dr. Wolfort. The problem is compounded when you consider the economic loss resulting from the disability, especially if the person's profession depends on the skillful use of his or her hands. Over the past 25 years, hand surgery has developed as a specialty through the efforts of general, orthopedic and plastic surgeons." Dr. Wolfort is editor of a recently published book on the subject – "Acute Hand Injuries – A Multi-specialty Approach."

The above situations involve restoring the body to its normal capacity and appearance. In the case of some congenital diseases, it's a matter of providing a function which never existed. For example, a young woman who has bilateral Moebius syndrome cannot move her facial muscles to smile, to grimace or to show any emotion whatsoever. A plastic surgeon can improve this condition by facial muscle transfers which are innervated by the 5th cranial nerve. This nerve controls the muscles of mastication which are not affected by the disease. With help from a physical therapist, and a lot of practice and concentration, the woman can gain control of her facial expression.

Other deformities, such as torticollis (twisted neck), a condition found in infants, affects the growth of bone and skull formation. The plastic surgeon cuts along the natural crease in the neck to remove the muscle cord creating this problem.

Another congenital defect, found in both men and women, involves the pectoral (chest) muscles. One 28-year-old man, Alan B., underwent surgery to rebuild the right side of his chest. A section of his pectoral muscle was missing, leaving a flat surface between his collar bone and rib cage.

Dr. Wolfort filled in the area by transferring a back muscle to the man's chest and attaching it to the breast bone. "I'm feeling a twitching sensation now, which will go away after physical therapy as the muscle adjusts to its new function," said Alan, six weeks after surgery. "The operation wasn't crucial for my physical health, but it has made me feel better about myself."

The increasing awareness of breast reconstructive surgery has focused more attention on the various kinds of surgery performed by a plastic surgeon. Now that many women opt for breast reconstruction following mastectomy, many surgeons are consulting with plastic surgeons preoperatively. The surgeon may decide to make a different type of incision if reconstruction is involved.

And this part of the reason the plastic surgeon differs from orthopedic surgeons and microsurgeons. "Along with concern about repair and function, the plastic surgeon places heavy emphasis on the final appearance," said Dr. Wolfort, "We have the ability to go beyond saving lives and consider also the quality of life following surgery."

Stroke *(continued from page 1)*

Until recently, tests to identify people at risk of stroke have relied upon indirectly monitoring carotid flow by detecting changes in blood flow to the eye. Limitations exist with these methods, however, especially when both carotid arteries are diseased.

For the past year, Dr. Daniel O'Leary, who is both a neuroradiologist and a neurologist at NEDH, has been testing several ultrasound units that directly measure narrowing of the carotid artery in the neck, the site where atherosclerotic disease often occurs. Early detection can offer surgical options for treatment before harm strikes.

The most promising of these new tests is the Doppler Echoflow instrument, which uses ultrasound waves to measure the speed with which red blood cells move across different points in the arteries. If a blood vessel is narrowed by disease at a certain point, the velocity of flow increases across this site, a condition the Doppler machine can detect.

Dr. O'Leary, who has performed over 700 stroke prevention tests during the past year with the Doppler Scanner, says the new test shows much promise for preventing strokes. Thus far, these tests have proved about 95% accurate in determining whether a vessel has narrowed – a good indication of stroke potential.

Although the Doppler test does not replace the angiograph, it does help achieve better patient selection for this procedure especially when combined with existing indirect tests presently being performed at NEDH. Patients with normal Doppler study results may be spared unnecessary angiography and those with significant lesions may be identified before clinical problems develop. The scanner test is non-invasive (does not penetrate the skin), can be performed on an out-patient basis and is completely safe.

According to Dr. O'Leary the greatest argument for continued research in this field in both human and economic terms will be the real savings resulting from reduced stroke.

New England Deaconess Hospital **pulse**

The New England Deaconess Hospital is a 489-bed and 14-building complex. Physicians from the Joslin Clinic, the Lahey Clinic, Overholt Thoracic Clinic and the general medical and surgical staffs serve the needs of their patients at the hospital. The Deaconess is internationally known for diagnosis, treatment and research in brain and chest surgery, cancer, diabetes and general medicine, and is affiliated with Harvard Medical School.

PULSE is published monthly by the public relations department of the New England Deaconess Hospital.

LAURENS MACLURE
President
RICHARD E. LEE
Director
M. ELEANOR (CLAPP) LOWRY
Public Relations Director
DONALD P. FRASER
Public Relations Assistant
NANCY A. SEIDEMAN
Editorial Assistant
MADELINE HARCOURT
Secretary

A pair of smoothies – Ray Carlson, maintenance and engineering, and Susan Welsh, building services, were in rare form on the dance floor at the 25th Annual Service Awards Dinner (see page 3).

New England Deaconess Hospital
185 Pilgrim Road
Boston, Massachusetts 02215

Non-Profit
U. S. Postage
PAID
Permit No. 18
Holliston, MA 01746

TIME VALUE